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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,957	01/13/2004	Durga P. Malladi	030224	4816

23696 7590 07/11/2008

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EXAMINER	
HUYNH, NAM TRUNG	

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
07/11/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/756,957	MALLADI ET AL.	
	Examiner	Art Unit	
	NAM HUYNH	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-6,8,12-17,19,23-28,30 and 34-43* is/are rejected.

7)☒ Claim(s) *7,9-11,18,20-22,29 and 31-33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 4/11/2008. Of the previously presented claims 1-33, claims 1, 12, and 23 have been amended, and claims 34-43 have been added.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6, 12-17, 23-28, and 34-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2003/0050086) (hereinafter Lee) in view of Okumura et al. (US 6,108,384) (hereinafter Okumura).

Regarding claims 1, 12, 23, 34, and 39, Lee discloses a method of adjusting a signal power in a variable data rate mode in a mobile communications system (title). In the scope of the invention, a mobile station and base station transmit packet data on a reverse link packet data channel (R-PDCH) (burst oriented channel) and a reverse rate indicator channel (RRI) (rate indicator channel) (page 3, paragraph 62, 66). Lee teaches that the base station decodes the RRI channel (paragraph 154) and measures the quality of the reverse link channel (paragraph 161), but does not explicitly disclose determining the presence of a packet on the rate indicator channel based on a likelihood generated by a maximum likelihood decoder that decodes the rate indicator channel. Okumura discloses a data receiver that implements a higher quality rate variable rate transmission by making a more positive rate decision (abstract). Okumura teaches that it is necessary for a receiver to acquire information about the transmission rate of each frame by some means (column 1, lines 23-25) and introduces a rate decision algorithm and error correcting decoder that implements maximum likelihood decoding to determine the presence of a packet (column 10, lines 65-67; column 11; column 12, lines 1-40). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lee to allow a maximum likelihood decoder to detect the presence of a packet on the rate indicator channel, as taught by Okumura, in order to allow the base station to positively detect the rate information when there is no transmission error and to make a rate decision using likelihood information obtained in the decoding when there are transmission errors. This modification allows the base station of Lee to more accurately determine

the rate information received on the RRI which in turn improves the accuracy and efficiency for controlling power to the mobile station.

Regarding claims 2, 13, 24, 35, and 40, Okumura teaches determining the presence of a packet is

performed at predetermined intervals (column 11, lines 14-24).

Regarding claims 3, 14, 25, 36, and 41, Okumura teaches the interval is a subframe interval (each frame) (column 11, lines 14-24).

Regarding claims 4, 15, 26, 37, and 42, Okumura teaches determining the validity of a frame (column 11, lines 5-13, errors are detected).

Regarding claims 5, 16, 27, 38, and 43, Okumra teaches determining the validity of a frame comprises analyzing the packet if the packet is detected (column 11, lines 28-41).

Regarding claims 6, 17, and 28, with respect to figure 3, Lee shows in the BS Rx row a time point (sub-packet ID) and data rate indicated (payload).

4. Claims 8, 19, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 2003/0050086) (hereinafter Lee) in view of Okumura et al. (US 6,108,384) (hereinafter Okumura) as applied to claims 5, 16, and 27 above, and further in view of Jou et al. (US 2001/0019541) (hereinafter Jou).

The combination of Lee and Okumura discloses the limitations set forth in claims 5, 16, and 27, but does not explicitly disclose that the sub-packet ID and payload size of the packet is compared to sub-packet IDs and payload sizes of previous packets. Jou

discloses a system and method for the detection of zero-rate communication frames on forward and reverse links (abstract). In the reverse link, Jou teaches that a metrics are generated for detecting a zero-rate frame using the energy of different cold zones (payload) and hot zones (sub-packet IDs) of a frame. Jou exemplifies two cold zones and two hot zones of an entire 20ms frame which therefore shows the comparison of previous packets (page 8, paragraphs 87-91). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Lee and Okumura to include taking into account metrics determined by previous packets, as taught by Jou, in order to more accurately identify the reception of a zero-rate packet.

Allowable Subject Matter

5. Claims 7, 9-11, 18, 20-22, 29, and 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

NTH
7/3/08